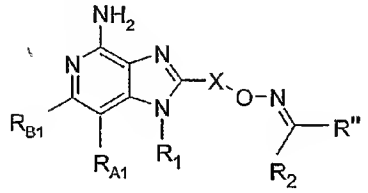
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Canceled)

2. (Currently amended) A compound of the Formula II:



II

wherein:

X is C_{1-10} alkylene or C_{2-10} alkenylene;

R_{A1} and R_{B1} are ~~each independently selected from the group consisting of:~~

~~hydrogen,~~

~~halogen,~~

~~alkyl,~~

~~alkenyl,~~

~~alkoxy,~~

~~alkylthio, and~~

~~$-N(R_9)_2$;~~

~~or when~~ taken together~~, R_{A1} and R_{B1}~~ to form a fused 6-membered aryl ring ~~or heteroaryl ring containing one heteroatom selected from the group consisting of N and S~~, wherein the aryl~~ or heteroaryl~~ ring is unsubstituted or substituted by one or more R groups, or substituted by one R_3 group, or substituted by one R_3 group and one R group; or ~~when taken together, R_{A1} and R_{B1} form~~ a fused ~~5 to 7~~ 6-membered saturated ring, ~~optionally containing one heteroatom selected from the~~

~~group consisting of N and S, and~~ wherein the saturated ring is unsubstituted or substituted by one or more R groups;

R is selected from the group consisting of:

halogen,

hydroxy,

alkyl,

alkenyl,

haloalkyl,

alkoxy,

alkylthio, and

$N(R_9)_2$;

R_1 is selected from the group consisting of:

$-R_4$,

$-X'-R_4$,

$-X'-Y-R_4$,

$-X'-Y-X'-Y-R_4$,

$-X'-R_5$,

$-X''-O-NR_{1a}-Y'-R_{1b}$, and

$-X''-O-N=C(R_1')(R_1'')$;

R_2, R'', R_{1a}, R_{1b}, R_1', and R_1'' are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

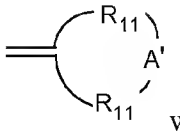
heterocyclyl,

heterocyclylalkylenyl, and

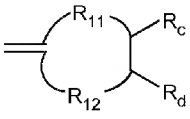
alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,
alkyl,
haloalkyl,
hydroxyalkyl,
alkoxy,
amino,
dialkylamino,
$-S(O)_{0-2}$-alkyl,
$-S(O)_{0-2}$-aryl,
$-NH-S(O)_2$-alkyl,
$-NH-S(O)_2$-aryl,
haloalkoxy,
halogen,
cyano,
nitro,
aryl,
heteroaryl,
heterocyclyl,
aryloxy,
arylalkyleneoxy,
-C(O)-O-alkyl,
$-C(O)-N(R_8)_2$,
$-N(R_8)$-C(O)-alkyl,
-O-(CO)-alkyl, and
-C(O)-alkyl;

or R_2 and R" and/or R_1' and R_1" can join together to form a ring system selected from the group consisting of:

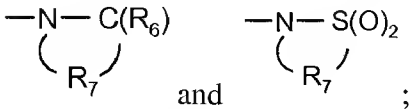


wherein the total number of atoms in the ring is 4 to 9, and



wherein the total number of atoms in the ring is 4 to 9;

or R_{1a} and R_{1b} together with the nitrogen atom and Y' to which they are bonded can join to form a ring selected from the group consisting of:



;

R_3 is selected from the group consisting of:

-Z-R_4,

-Z-X'-R_4,

-Z-X'-Y-R_4,

-Z-X'-Y-X'-Y-R_4, and

-Z-X'-R_5;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more -O- groups;

X" is selected from the group consisting of -CH(R_{13})-alkylene- and -CH(R_{13})-alkenylene-, wherein the alkylene and alkenylene are optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

-$S(O)_{0-2}$-,

-$S(O)_2$-N(R_8)-,

-C(R_6)-,

-C(R_6)-O-,

-O-C(R_6)-,

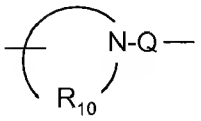
-O-C(O)-O-,

-N(R_8)-Q-,

-C(R_6)-N(R_8)-,

-O-C(R_6)-N(R_8)-,

-C(R_6)-N(OR_9)-,



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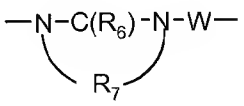

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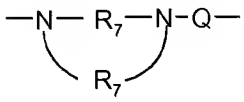

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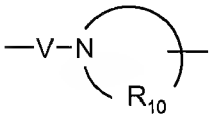
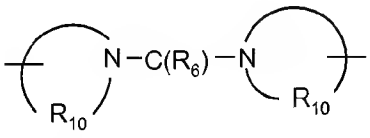


; and



;

Y' is selected from the group consisting of:

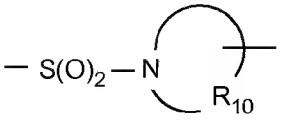
a bond,

-C(O)-,

-C(S)-,

-$S(O)_2$-,

-$S(O)_2$-N(R_8)-,



;

-C(O)-O-,

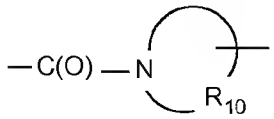
-C(O)-N(R_8)-,

-C(S)-N(R_8)-,

-C(O)-N(R_8)-S(O)$_2$-,

-C(O)-N(R_8)-C(O)-,

-C(S)-N(R_8)-C(O)-,



;

-C(O)-C(O)-,

-C(O)-C(O)-O-, and

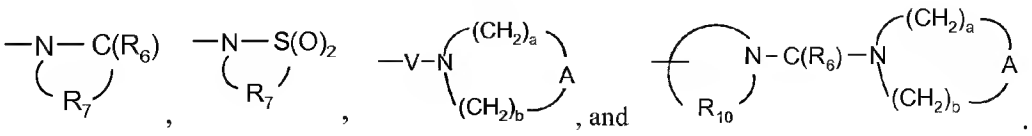
-C(=NH)-N(R_8)-;

Z is a bond or -O-;

R_c and R_d are independently selected from the group consisting of hydrogen, halogen, hydroxy, alkyl, alkenyl, aryl, haloalkyl, alkoxy, alkylthio, and -N(R_9)$_2$; or R_c and R_d can join to form a fused aryl ring or fused 5-10 membered heteroaryl ring containing one to four heteroatoms;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



;

R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{1-10} alkoxy-C_{1-10} alkylenyl, and aryl-C_{1-10} alkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

R_{11} is C_{1-6} alkylene or C_{2-6} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{12} is selected from the group consisting of a bond, C_{1-5} alkylene, and C_{2-5} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{13} is selected from the group consisting of hydrogen and alkyl which may be optionally interrupted by one or more -O- groups;

A is selected from the group consisting of $-CH_2-$, -O-, -C(O)-, $-S(O)_{0-2}-$, and $-N(R_4)-$;

A' is selected from the group consisting of -O-, $-S(O)_{0-2}-$, $-N(-Q-R_4)-$, and $-CH_2-$;

Q is selected from the group consisting of a bond, $-C(R_6)-$, $-C(R_6)-C(R_6)-$, $-S(O)_2-$, $-C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)-$;

V is selected from the group consisting of $-C(R_6)-$, $-O-C(R_6)-$, $-N(R_8)-C(R_6)-$, and $-S(O)_2-$;

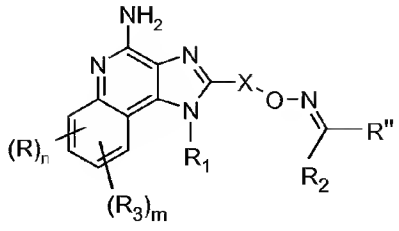
W is selected from the group consisting of a bond, -C(O)-, and $-S(O)_2-$; and

a and b are independently integers from 1 to 6 with the proviso that a+b is ≤ 7;

or a pharmaceutically acceptable salt thereof.

3. (Canceled)

4. (Original) A compound of the Formula IIIa:



IIIa

wherein:

X is C_{1-10} alkylene or C_{2-10} alkenylene;

R is selected from the group consisting of:

halogen,

hydroxy,

alkyl,

alkenyl,

haloalkyl,

alkoxy,

alkylthio, and

$-N(R_9)_2$;

R_1 is selected from the group consisting of:

$-R_4$,

$-X'-R_4$,

$-X'-Y-R_4$,

$-X'-Y-X'-Y-R_4$,

$-X'-R_5$,

$-X''-O-NR_{1a}-Y'-R_{1b}$, and

$-X''-O-N=C(R_1')(R_1'')$;

R_2, R'', R_{1a}, R_{1b}, R_1', and R_1'' are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

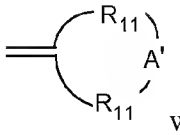
heterocyclyl,

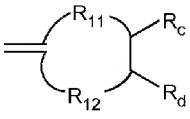
heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

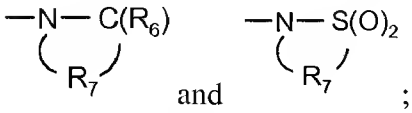
hydroxy,
alkyl,
haloalkyl,
hydroxyalkyl,
alkoxy,
amino,
dialkylamino,
-$S(O)_{0-2}$-alkyl,
-$S(O)_{0-2}$-aryl,
-NH-$S(O)_2$-alkyl,
-NH-$S(O)_2$-aryl,
aryl,
haloalkoxy,
halogen,
cyano,
nitro,
aryl,
heteroaryl,
heterocyclyl,
aryloxy,
arylalkyleneoxy,
-C(O)-O-alkyl,
-$C(O)$-$N(R_8)_2$,
-$N(R_8)$-C(O)-alkyl,
-O-(CO)-alkyl, and
-C(O)-alkyl;

or R_2 and R" and/or R_1' and R_1" can join together to form a ring system selected from the group consisting of:

 wherein the total number of atoms in the ring is 4 to 9, and

 wherein the total number of atoms in the ring is 4 to 9;

or R_{1a} and R_{1b} together with the nitrogen atom and Y' to which they are bonded can join to form a ring selected from the group consisting of:

 ;

R_3 is selected from the group consisting of:

-Z-R_4,

-Z-X'-R_4,

-Z-X'-Y-R_4,

-Z-X'-Y-X'-Y-R_4, and

-Z-X'-R_5;

n is an integer from 0 to 4;

m is 0 or 1; with the proviso that when m is 1, then n is 0 or 1;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more -O- groups;

X" is selected from the group consisting of -CH(R_{13})-alkylene- and -CH(R_{13})-alkenylene-, wherein the alkylene and alkenylene are optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

-$S(O)_{0-2}$-,

-$S(O)_2$-N(R_8)-,

-C(R_6)-,

-C(R_6)-O-,

-O-C(R_6)-,

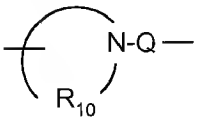
-O-C(O)-O-,

-N(R_8)-Q-,

-C(R_6)-N(R_8)-,

-O-C(R_6)-N(R_8)-,

-C(R_6)-N(OR_9)-,



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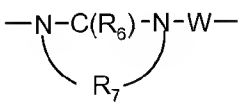

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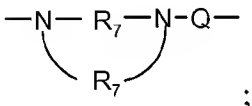

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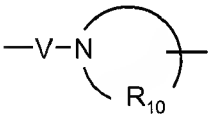

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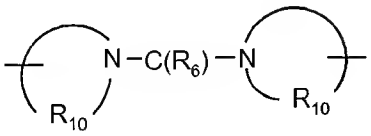


;

Y' is selected from the group consisting of:

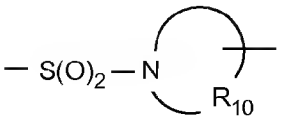
a bond,

-C(O)-,

-C(S)-,

-$S(O)_2$-,

-$S(O)_2$-N(R_8)-,



;

-C(O)-O-,

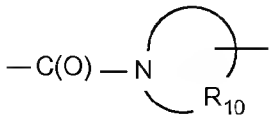
-C(O)-N(R_8)-,

-C(S)-N(R_8)-,

-C(O)-N(R_8)-S($O)_2$-,

-C(O)-N(R_8)-C(O)-,

-C(S)-N(R_8)-C(O)-,



;

-C(O)-C(O)-,

-C(O)-C(O)-O-, and

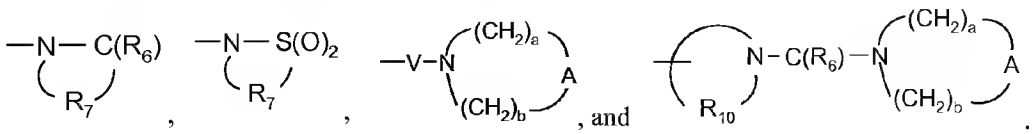
-C(=NH)-N(R_8)-;

Z is a bond or -O-;

R_c and R_d are independently selected from the group consisting of hydrogen, halogen, hydroxy, alkyl, alkenyl, aryl, haloalkyl, alkoxy, alkylthio, and -N($R_9)_2$; or R_c and R_d can join to form a fused aryl ring or fused 5-10 membered heteroaryl ring containing one to four heteroatoms;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



;

R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{1-10} alkoxy-C_{1-10} alkylenyl, and aryl-C_{1-10} alkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

R_{11} is C_{1-6} alkylene or C_{2-6} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{12} is selected from the group consisting of a bond, C_{1-5} alkylene, and C_{2-5} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{13} is selected from the group consisting of hydrogen and alkyl which may be optionally interrupted by one or more -O- groups;

A is selected from the group consisting of $-CH_2-$, -O-, -C(O)-, $-S(O)_{0-2}-$, and $-N(R_4)-$;

A' is selected from the group consisting of -O-, $-S(O)_{0-2}-$, $-N(-Q-R_4)-$, and $-CH_2-$;

Q is selected from the group consisting of a bond, $-C(R_6)-$, $-C(R_6)-C(R_6)-$, $-S(O)_2-$, $-C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)-$;

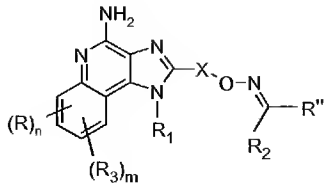
V is selected from the group consisting of $-C(R_6)-$, $-O-C(R_6)-$, $-N(R_8)-C(R_6)-$, and $-S(O)_2-$;

W is selected from the group consisting of a bond, -C(O)-, and $-S(O)_2-$; and

a and b are independently integers from 1 to 6 with the proviso that a+b is ≤ 7;

or a pharmaceutically acceptable salt thereof.

5. (Original) A compound of the Formula IIIa:



IIIa

wherein:

X is C_{1-10} alkylene or C_{2-10} alkenylene;

R is selected from the group consisting of:

halogen,

hydroxy,

alkyl,

alkenyl,

haloalkyl,

alkoxy,

alkylthio, and

$-N(R_9)_2$;

R_1 is selected from the group consisting of:

$-R_4$,

$-X'-R_4$,

$-X'-Y-R_4$,

$-X'-Y-X'-Y-R_4$,

$-X'-R_5$,

$-X''-O-NH-Y'-R_{1'}$, and

$-X''-O-N=C(R_1')(R_1'')$;

R_2, R'', R_1', and R_1'' are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

heterocyclyl,

heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,

alkyl,

haloalkyl,

hydroxyalkyl,

alkoxy,

dialkylamino,

-S(O)$_{0-2}$-alkyl,

-S(O)$_{0-2}$-aryl,

-NH-S(O)$_2$-alkyl,

-NH-S(O)$_2$-aryl,

haloalkoxy,

halogen,

cyano,

nitro,

aryl,

heteroaryl,

heterocyclyl,

aryloxy,

arylalkyleneoxy,

-C(O)-O-alkyl,

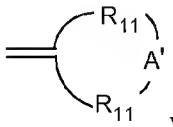
-C(O)-N(R_8)$_2$,

-N(R_8)-C(O)-alkyl-,

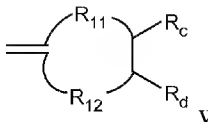
-O-(CO)-alkyl, and

-C(O)-alkyl;

or R_2 and R" and/or R_1' and R_1" can join together to form a ring system selected from the group consisting of:



wherein the total number of atoms in the ring is 4 to 9, and

 wherein the total number of atoms in the ring is 4 to 9;

R_3 is selected from the group consisting of:

-Z-R_4,

-Z-X'-R_4,

-Z-X'-Y-R_4,

-Z-X'-Y-X'-Y-R_4, and

-Z-X'-R_5;

n is an integer from 0 to 4;

m is 0 or 1; with the proviso that when m is 1, then n is 0 or 1;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more -O- groups;

X" is -CH(R_{13})-alkylene- or -CH(R_{13})-alkenylene-;

Y is selected from the group consisting of:

-$S(O)_{0-2}$-,

-$S(O)_2$-N(R_8)-,

-C(R_6)-,

-C(R_6)-O-,

-O-C(R_6)-,

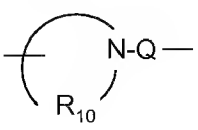
-O-C(O)-O-,

-N(R_8)-Q-,

-C(R_6)-N(R_8)-,

-O-C(R_6)-N(R_8)-,

-C(R_6)-N(OR_9)-,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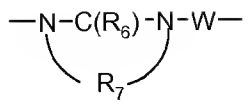
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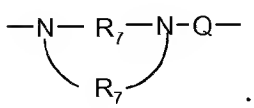
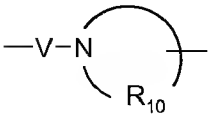
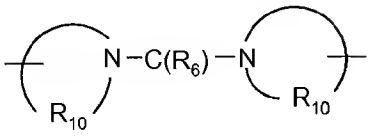

;


; and


;

Y' is selected from the group consisting of:

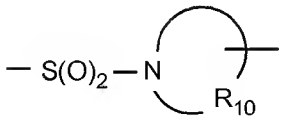
a bond,

-C(O)-,

-C(S)-,

-$S(O)_2$-,

-$S(O)_2$-$N(R_8)$-,


;

-C(O)-O-,

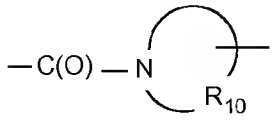
-C(O)-$N(R_8)$-,

-C(S)-$N(R_8)$-,

-C(O)-$N(R_8)$-$S(O)_2$-,

-C(O)-$N(R_8)$-C(O)-,

-C(S)-$N(R_8)$-C(O)-,


;

-C(O)-C(O)-,

-C(O)-C(O)-O-, and

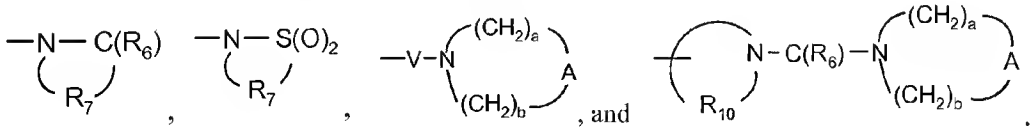
-C(=NH)-N(R_8)-;

Z is a bond or -O-;

R_c and R_d are independently selected from the group consisting of hydrogen, halogen, hydroxy, alkyl, alkenyl, aryl, haloalkyl, alkoxy, alkylthio, and -N(R_9)$_2$; or R_c and R_d can join to form a fused aryl ring or fused 5-10 membered heteroaryl ring containing one to four heteroatoms;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



;

R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{1-10} alkoxy-C_{1-10} alkylenyl, and aryl-C_{1-10} alkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

R_{11} is C_{1-6} alkylene or C_{2-6} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{12} is selected from the group consisting of a bond, C_{1-5} alkylene, and C_{2-5} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{13} is selected from the group consisting of hydrogen and alkyl which may be optionally interrupted by one or more -O- groups;

A is selected from the group consisting of $-CH_2-$, -O-, -C(O)-, $-S(O)_{0-2}-$, and $-N(R_4)-$;

A' is selected from the group consisting of -O-, $-S(O)_{0-2}-$, $-N(-Q-R_4)-$, and $-CH_2-$;

Q is selected from the group consisting of a bond, $-C(R_6)-$, $-C(R_6)-C(R_6)-$, $-S(O)_2-$, $-C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)-$;

V is selected from the group consisting of $-C(R_6)-$, $-O-C(R_6)-$, $-N(R_8)-C(R_6)-$, and $-S(O)_2-$;

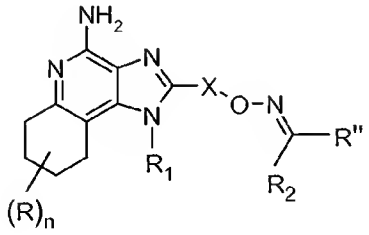
W is selected from the group consisting of a bond, -C(O)-, and $-S(O)_2-$; and

a and b are independently integers from 1 to 6 with the proviso that a+b is ≤ 7;

or a pharmaceutically acceptable salt thereof.

6. (Canceled)

7. (Previously presented) The compound of claim 2 wherein the compound is of the Formula IVa:



IVa

wherein:

X is C_{1-10} alkylene or C_{2-10} alkenylene;

R is selected from the group consisting of:

halogen,

hydroxy,

alkyl,

alkenyl,

haloalkyl,

alkoxy,

alkylthio, and

$-N(R_9)_2$;

n is an integer from 0 to 4;

R_1 is selected from the group consisting of:

$-R_4$,

$-X'-R_4$,

$-X'-Y-R_4$,

$-X'-Y-X'-Y-R_4$,

$-X'-R_5$,

$-X''-O-NR_{1a}-Y'-R_{1b}$, and

$-X''-O-N=C(R_1')(R_1'')$;

R_2, R'', R_{1a}, R_{1b}, R_1', and R_1'' are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

heterocyclyl,

heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,

alkyl,

haloalkyl,

hydroxyalkyl,

alkoxy,

amino,

dialkylamino,

-S(O)$_{0-2}$-alkyl,

-S(O)$_{0-2}$-aryl,

-NH-S(O)$_2$-alkyl,

-NH-S(O)$_2$-aryl,

haloalkoxy,

halogen,

cyano,

nitro,

aryl,

heteroaryl,

heterocyclyl,

aryloxy,

arylalkyleneoxy,

-C(O)-O-alkyl,

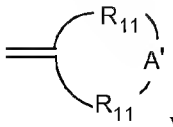
-C(O)-N(R_8)$_2$,

-N(R_8)-C(O)-alkyl,

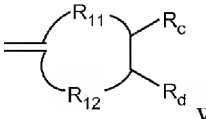
-O-(CO)-alkyl, and

-C(O)-alkyl;

or R_2 and R" and/or R_1' and R_1" can join together to form a ring system selected from the group consisting of:

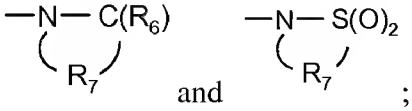


wherein the total number of atoms in the ring is 4 to 9, and



wherein the total number of atoms in the ring is 4 to 9;

or R_{1a} and R_{1b} together with the nitrogen atom and Y' to which they are bonded can join to form a ring selected from the group consisting of:



;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more -O- groups;

X" is selected from the group consisting of -CH(R_{13})-alkylene- and -CH(R_{13})-alkenylene-, wherein the alkylene and alkenylene are optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

-$S(O)_{0-2}$-,

-$S(O)_2$-$N(R_8)$-,

-$C(R_6)$-,

-$C(R_6)$-O-,

-O-$C(R_6)$-,

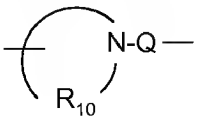
-O-C(O)-O-,

-$N(R_8)$-Q-,

-$C(R_6)$-$N(R_8)$-,

-O-$C(R_6)$-$N(R_8)$-,

-$C(R_6)$-$N(OR_9)$-,



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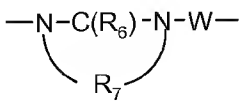

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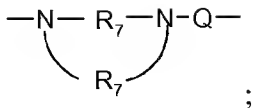

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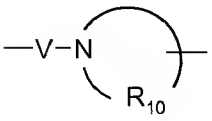
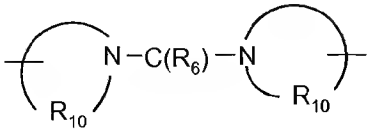


; and



;

Y' is selected from the group consisting of:

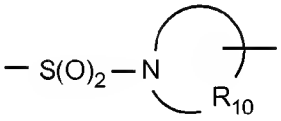
a bond,

-C(O)-,

-C(S)-,

-$S(O)_2$-,

-$S(O)_2$-$N(R_8)$-,



;

-C(O)-O-,

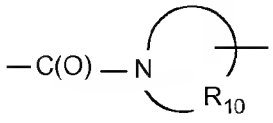
-$C(O)$-$N(R_8)$-,

-$C(S)$-$N(R_8)$-,

-$C(O)$-$N(R_8)$-$S(O)_2$-,

-$C(O)$-$N(R_8)$-$C(O)$-,

-$C(S)$-$N(R_8)$-$C(O)$-,



;

-C(O)-C(O)-,

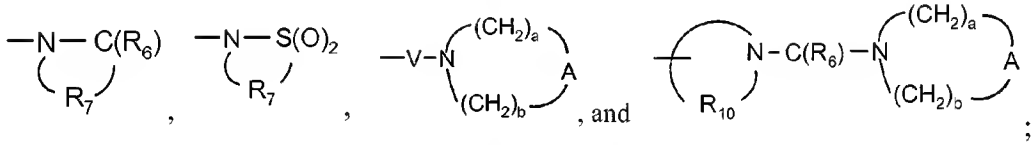
-C(O)-C(O)-O-, and

-$C(=NH)$-$N(R_8)$-;

R_c and R_d are independently selected from the group consisting of hydrogen, halogen, hydroxy, alkyl, alkenyl, aryl, haloalkyl, alkoxy, alkylthio, and $-N(R_9)_2$; or R_c and R_d can join to form a fused aryl ring or fused 5-10 membered heteroaryl ring containing one to four heteroatoms;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



;

R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{1-10} alkoxy-C_{1-10} alkylenyl, and aryl-C_{1-10} alkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

R_{11} is C_{1-6} alkylene or C_{2-6} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{12} is selected from the group consisting of a bond, C_{1-5} alkylene, and C_{2-5} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{13} is selected from the group consisting of hydrogen and alkyl which may be optionally interrupted by one or more -O- groups;

A is selected from the group consisting of -CH_2-, -O-, -C(O)-, -$S(O)_{0-2}$-, and -$N(R_4)$-;

A' is selected from the group consisting of -O-, -$S(O)_{0-2}$-, -N(-Q-R_4)-, and -CH_2-;

Q is selected from the group consisting of a bond, -$C(R_6)$-, -$C(R_6)$-$C(R_6)$-, -$S(O)_2$-, -$C(R_6)$-$N(R_8)$-W-, -$S(O)_2$-$N(R_8)$-, -$C(R_6)$-O-, and -$C(R_6)$-$N(OR_9)$-;

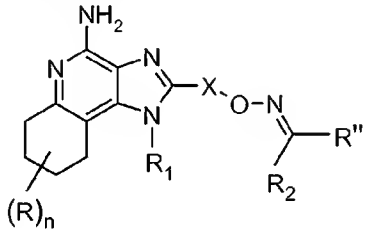
V is selected from the group consisting of -$C(R_6)$-, -O-$C(R_6)$-, -$N(R_8)$-$C(R_6)$-, and -$S(O)_2$-;

W is selected from the group consisting of a bond, -C(O)-, and -$S(O)_2$-; and

a and b are independently integers from 1 to 6 with the proviso that a+b is $\leq$7;

or a pharmaceutically acceptable salt thereof.

8. (Original) A compound of the Formula IVa:



IVa

wherein:

X is C_{1-10} alkylene or C_{2-10} alkenylene;

R is selected from the group consisting of:

halogen,

hydroxy,

alkyl,

alkenyl,

haloalkyl,

alkoxy,

alkylthio, and

-$N(R_9)_2$;

n is an integer from 0 to 4;

R_1 is selected from the group consisting of:

$-R_4$,

$-X'-R_4$,

$-X'-Y-R_4$,

$-X'-Y-X'-Y-R_4$,

$-X'-R_5$,

$-X''-O-NH-Y'-R_1'$, and

$-X''-O-N=C(R_1')(R_1'')$;

R_2, R'', R_1', and R_1'' are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

heterocyclyl,

heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,

alkyl,

haloalkyl,

hydroxyalkyl,

alkoxy,

dialkylamino,

$-S(O)_{0-2}$-alkyl,

$-S(O)_{0-2}$-aryl,

$-NH-S(O)_2$-alkyl,

$-NH-S(O)_2$-aryl,

haloalkoxy,

halogen,

cyano,

nitro,

aryl,

heteroaryl,

heterocyclyl,

aryloxy,

arylalkyleneoxy,

-C(O)-O-alkyl,

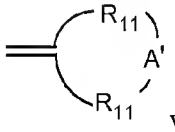
-C(O)-N(R_8)$_2$,

-N(R_8)-C(O)-alkyl-,

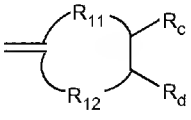
-O-(CO)-alkyl, and

-C(O)-alkyl;

or R_2 and R" and/or R_1' and R_1" can join together to form a ring system selected from the group consisting of:



wherein the total number of atoms in the ring is 4 to 9, and



wherein the total number of atoms in the ring is 4 to 9;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more -O- groups;

X" is -CH(R_{13})-alkylene- or -CH(R_{13})-alkenylene-;

Y is selected from the group consisting of:

-S(O)$_{0-2}$-,

-S(O)$_2$-N(R_8)-,

-$C(R_6)$-,

-$C(R_6)$-O-,

-O-$C(R_6)$-,

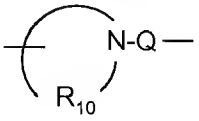
-O-C(O)-O-,

-$N(R_8)$-Q-,

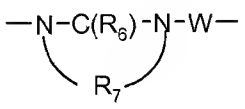
-$C(R_6)$-$N(R_8)$-,

-O-$C(R_6)$-$N(R_8)$-,

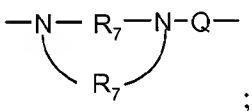
-$C(R_6)$-$N(OR_9)$-,



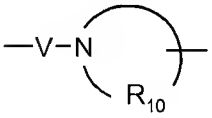
;



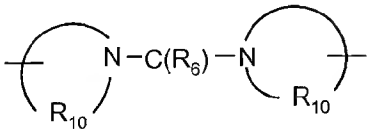
;



;



; and



;

Y' is selected from the group consisting of:

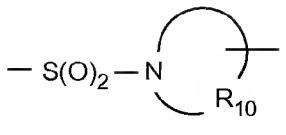
a bond,

-C(O)-,

-C(S)-,

-$S(O)_2$-,

-$S(O)_2$-$N(R_8)$-,



;

-C(O)-O-,

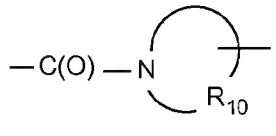
-C(O)-N(R_8)-,

-C(S)-N(R_8)-,

-C(O)-N(R_8)-S$(O)_2$-,

-C(O)-N(R_8)-C(O)-,

-C(S)-N(R_8)-C(O)-,



;

-C(O)-C(O)-,

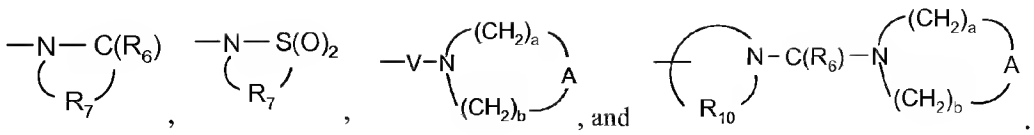
-C(O)-C(O)-O-, and

-C(=NH)-N(R_8)-;

R_c and R_d are independently selected from the group consisting of hydrogen, halogen, hydroxy, alkyl, alkenyl, aryl, haloalkyl, alkoxy, alkylthio, and -N$(R_9)_2$; or R_c and R_d can join to form a fused aryl ring or fused 5-10 membered heteroaryl ring containing one to four heteroatoms;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



;

R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{1-10} alkoxy-C_{1-10} alkylenyl, and aryl-C_{1-10} alkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

R_{11} is C_{1-6} alkylene or C_{2-6} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{12} is selected from the group consisting of a bond, C_{1-5} alkylene, and C_{2-5} alkenylene, wherein the alkylene or alkenylene is optionally interrupted by one heteroatom;

R_{13} is selected from the group consisting of hydrogen and alkyl which may be optionally interrupted by one or more -O- groups;

A is selected from the group consisting of $-CH_2-$, -O-, -C(O)-, $-S(O)_{0-2}-$, and $-N(R_4)-$;

A' is selected from the group consisting of -O-, $-S(O)_{0-2}-$, $-N(-Q-R_4)-$, and $-CH_2-$;

Q is selected from the group consisting of a bond, $-C(R_6)-$, $-C(R_6)-C(R_6)-$, $-S(O)_2-$, $-C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)-$;

V is selected from the group consisting of $-C(R_6)-$, $-O-C(R_6)-$, $-N(R_8)-C(R_6)-$, and $-S(O)_2-$;

W is selected from the group consisting of a bond, -C(O)-, and $-S(O)_2-$; and

a and b are independently integers from 1 to 6 with the proviso that a+b is ≤ 7;

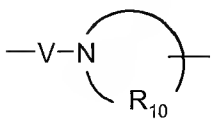
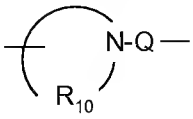
or a pharmaceutically acceptable salt thereof.

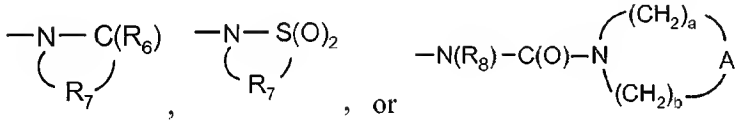
9.-15. (Canceled)

16. (Previously presented) The compound or salt of claim 7 wherein n is 0.

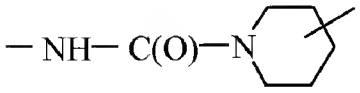
17. (Previously presented) The compound or salt of claim 4 wherein n and m are 0.

18.-22. (Canceled)

23. (Previously presented) The compound or salt of claim 2 wherein R_1 is selected from the group consisting of alkyl, arylalkylenyl, aryloxyalkylenyl, hydroxyalkyl, alkylsulfonylalkylenyl, -X'-Y-R_4, and -X'-R_5; wherein X' is alkylene; Y is -N(R_8)-C(O)-, -N(R_8)-S(O)$_2$-, -N(R_8)-S(O)$_2$-N(R_8)-, -N(R_8)-C(O)-N(R_8)-, -N(R_8)-C(O)-N(R_8)-C(O)-,  , or  ; R_4 is hydrogen, alkyl, alkenyl, aryl, or heteroaryl, wherein alkyl and alkenyl are optionally substituted by aryl or aryloxy and wherein aryl is optionally substituted by one or more substituents selected from the group consisting of alkyl, alkoxy, cyano, and halogen; and R_5 is



24. (Original) The compound or salt of claim 23 wherein R_1 is 2-methylpropyl, 2-hydroxy-2-methylpropyl, or -X'-Y-R_4; X' is ethylene, propylene, or butylene; Y is -NH-C(O)-, -NH-S(O)$_2$-, -NH-S(O)$_2$-N(R_8)-, -NH-C(O)-N(R_8)-, -NH-C(O)-NH-C(O)-, or



; and R_8 is hydrogen or methyl.

25. (Canceled)

26. (Previously presented) The compound or salt of claim 2 wherein at least one of R" or R_2 is selected from the group consisting of alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, and heterocyclylalkylenyl, wherein the alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, and heterocyclylalkylenyl are optionally substituted.

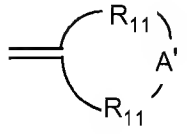
27-31. (Canceled)

32. (Previously presented) The compound or salt of claim 2 wherein R_2 and R" are independently C_{1-10} alkyl.

33. (Original) The compound or salt of claim 32 wherein R_2 and R" are each methyl.

34-35. (Canceled)

36. (Previously presented) The compound or salt of claim 2 wherein R_2 and R" join together to form the ring system



, wherein R_{11} is C_{1-2} alkylene; A' is $-CH_2-$, -O-, or $-N(-Q-R_4)-$; Q is a bond or -C(O)-; and R_4 is alkyl or arylalkylenyl.

37. (Previously presented) The compound or salt of claim 2 wherein X is C_{1-4} alkylene.

38. (Original) The compound or salt of claim 37 wherein X is methylene.

39. (Previously presented) The compound or salt of claim 2 wherein X is C_{1-4} alkylene; R_2 is C_{1-4} alkyl; R" is hydrogen or C_{1-4} alkyl; and R_1 is C_{1-6} alkyl or hydroxy-C_{1-6} alkyl; or X is C_{1-4} alkylene; R" is C_{1-4} alkyl; R_2 is hydrogen or C_{1-4} alkyl; and R_1 is C_{1-6} alkyl or hydroxy-C_{1-6} alkyl.

40-41. (Canceled)

42. (Previously presented) The compound or salt of claim 2 wherein X is methylene; R" and R_2 are methyl; and R_1 is 2-methylpropyl or 2-hydroxy-2-methylpropyl.

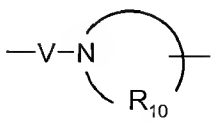
43. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 2 in combination with a pharmaceutically acceptable carrier.

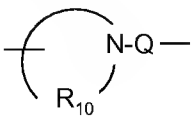
44. (Previously presented) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 2 to the animal.

45. (Previously presented) A method of treating a viral disease in an animal in need thereof comprising administering a therapeutically effective amount of a compound or salt of claim 2 to the animal.

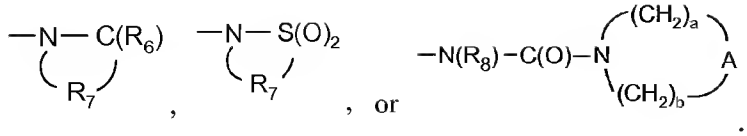
46. (Previously presented) A method of treating a neoplastic disease in an animal in need thereof comprising administering a therapeutically effective amount of a compound or salt of claim 2 to the animal.

47. (Canceled)

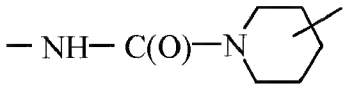
48. (Previously presented) The compound or salt of claim 4 wherein R_1 is selected from the group consisting of alkyl, arylalkylenyl, aryloxyalkylenyl, hydroxyalkyl, alkylsulfonylalkylenyl, -X'-Y-R_4, and -X'-R_5; wherein X' is alkylene; Y is -N(R_8)-C(O)-, -N(R_8)-S(O)$_2$-, -N(R_8)-S(O)$_2$-N(R_8)-, -N(R_8)-C(O)-N(R_8)-, -N(R_8)-C(O)-N(R_8)-C(O)-, 

, or 

; R_4 is hydrogen, alkyl, alkenyl, aryl, or heteroaryl, wherein alkyl and alkenyl are optionally substituted by aryl or aryloxy and wherein aryl is optionally substituted by one or more substituents selected from the group consisting of alkyl, alkoxy, cyano, and halogen; and R_5 is



49. (Previously presented) The compound or salt of claim 48 wherein R_1 is 2-methylpropyl, 2-hydroxy-2-methylpropyl, or -X'-Y-R_4; X' is ethylene, propylene, or butylene; Y is -NH-C(O)-, -NH-$S(O)_2$-, -NH-$S(O)_2$-N(R_8)-, -NH-C(O)-N(R_8)-, -NH-C(O)-NH-C(O)-, or



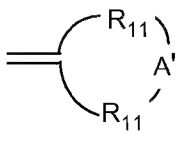
; and R_8 is hydrogen or methyl.

50. (Previously presented) The compound or salt of claim 4 wherein at least one of R" or R_2 is selected from the group consisting of alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, and heterocyclylalkylenyl, wherein the alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, and heterocyclylalkylenyl are optionally substituted.

51. (Previously presented) The compound or salt of claim 4 wherein R_2 and R" are independently C_{1-10} alkyl.

52. (Previously presented) The compound or salt of claim 51 wherein R_2 and R" are each methyl.

53. (Previously presented) The compound or salt of claim 4 wherein R_2 and R" join together to form the ring system



, wherein R_{11} is C_{1-2} alkylene; A' is -CH_2-, -O-, or -N(-Q-R_4)-; Q is a bond or -C(O)-; and R_4 is alkyl or arylalkylenyl.

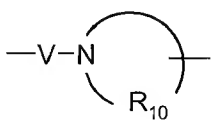
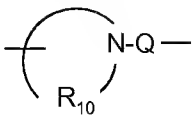
54. (Previously presented) The compound or salt of claim 4 wherein X is C_{1-4} alkylene.

55. (Previously presented) The compound or salt of claim 54 wherein X is methylene.

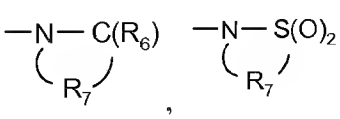
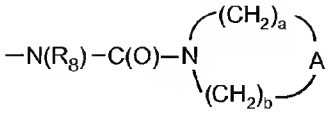
56. (Previously presented) The compound or salt of claim 4 wherein X is C_{1-4} alkylene; R_2 is C_{1-4} alkyl; R" is hydrogen or C_{1-4} alkyl; and R_1 is C_{1-6} alkyl or hydroxy-C_{1-6} alkyl; or X is C_{1-4} alkylene; R" is C_{1-4} alkyl; R_2 is hydrogen or C_{1-4} alkyl; and R_1 is C_{1-6} alkyl or hydroxy-C_{1-6} alkyl.

57. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 4 in combination with a pharmaceutically acceptable carrier.

58. (Previously presented) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 4 to the animal.

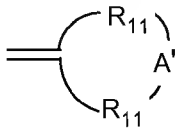
59. (Previously presented) The compound or salt of claim 7 wherein R_1 is selected from the group consisting of alkyl, arylalkylenyl, aryloxyalkylenyl, hydroxyalkyl, alkylsulfonylalkylenyl, -X'-Y-R_4, and -X'-R_5; wherein X' is alkylene; Y is -N(R_8)-C(O)-, -N(R_8)-S(O)$_2$-, -N(R_8)-S(O)$_2$-N(R_8)-, -N(R_8)-C(O)-N(R_8)-, -N(R_8)-C(O)-N(R_8)-C(O)-,  , or  ;

R_4 is hydrogen, alkyl, alkenyl, aryl, or heteroaryl, wherein alkyl and alkenyl are optionally substituted by aryl or aryloxy and wherein aryl is optionally substituted by one or more substituents selected from the group consisting of alkyl, alkoxy, cyano, and halogen; and R_5 is

 , , or  .

60. (Previously presented) The compound or salt of claim 7 wherein R_2 and R" are each methyl.

61. (Previously presented) The compound or salt of claim 7 wherein R_2 and R" join together to form the ring system



, wherein R_{11} is C_{1-2} alkylene; A' is $-CH_2-$, -O-, or $-N(-Q-R_4)-$; Q is a bond or -C(O)-; and R_4 is alkyl or arylalkylenyl.

62. (Previously presented) The compound or salt of claim 7 wherein X is methylene.

63. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 7 in combination with a pharmaceutically acceptable carrier.

64. (Previously presented) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 7 to the animal.

65.-79. (Canceled)